ENVIRONMENTAL
Fact Sheet

NEW HAMPSHIRE DEPARTMENT OF Environmental Services

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Is My "Non-Hazardous" Parts Washer Solution Hazardous?

More and more businesses are switching to environmentally friendly parts washer solutions in order to reduce costs, be environmentally conscious and limit their hazardous waste regulatory burden.

Environmentally friendly parts washer solutions, for example aqueous (water based) cleaners, may be marketed as being "non-hazardous," "non-chlorinated" or "non-ignitable." These claims may be entirely accurate when describing the *unused* parts washer solution. However, after you have used the parts washer solution to wash parts, it may become contaminated with solvents or metal bearing oils and greases at high enough levels to make your environmentally friendly parts washer solution a regulated hazardous waste.

Hazardous contaminants may include:

1. Toxic metals, such as cadmium, chromium or lead from wear of engine or other metal components.

2. Gasoline introduced into the parts washer solution, e.g., carburetor cleaning, which makes your spent parts washer solution ignitable and/or adds toxic benzene to the solution.

3. Other solvent spray cleaners, such as brake cleaners, that contain certain toxic constituents. Typical solvent ingredients you could find on a container label include: tetrachloroethylene, methylene chloride, trichloroethylene, methyl ethyl ketone (MEK), xylene, acetone, methyl isobutyl ketone (MIBK) and toluene.

Determining Whether the "Non-Hazardous" Spent Parts Washer Waste Is Hazardous

Even if you *lease* the parts washer unit, when the parts washer solution becomes spent (no longer useable) it becomes a waste and requires an evaluation by you as the "generator" of the waste. In other words, you need to make a "hazardous waste determination" before it is picked up for recycling or disposal.

In order to determine if your spent parts washer solution is a hazardous waste, you may need to hire an environmental laboratory to perform certain chemical analyses on a representative sample of your spent parts washer solution. A representative sample is defined in Env-Hw 104.34 as, "a sample of a universe or whole that can be expected to exhibit the average properties of the universe or the whole." The analyses should include, at a minimum, the following:

- Ignitability, i.e., flashpoint analysis.
- The Toxicity Characteristic Leaching Procedure (TCLP) for:
    - Heavy metals, such as arsenic, cadmium, chromium and lead.
    - Organic solvents, such as MEK, trichloroethylene, benzene and tetrachloroethylene.

Follow-up analyses should be repeated every five years, or whenever the facility's process or materials change.

Alternatively, you may declare your spent parts washer solution to be a hazardous waste without incurring the expense of laboratory analyses. You may determine that your spent parts washer solution is hazardous based upon the "knowledge" of your process. For example, if you use a spray can of chlorinated solvents, e.g., certain brake cleaners contain tetrachloroethylene, to clean parts over your parts washer sink, then it is likely that your spent parts washer solution is hazardous because it has become contaminated with solvents regulated as a hazardous waste. Even a few quick "taps" on the spray can may be enough to cause the parts washer solution to become regulated as a hazardous waste.

If you determine that your spent parts washer solution is a hazardous waste, you are required to manage the spent parts washer solution in accordance with Env-Hw 500 of the New Hampshire Hazardous Waste Rules, which includes requirements for proper storage, labeling, and disposal.

Please note that the same process above would apply for any filters and "sludges" that may accumulate in your parts washer unit.

Please note that it is your responsibility to make a proper hazardous waste determination … it is not your vendor's responsibility to do this for you.

Mixing with Used Oil

Can your spent parts washer solution be mixed with your used oil and burned to heat your facility? Maybe. You can determine this by following the steps listed below.

1. If your spent parts washer solution is hazardous because it contains metals or regulated solvents, the spent parts washer solution **cannot** be mixed with your used oil and must be managed in accordance with the Hazardous Waste Generator Requirements (Env-Hw 500).

2. If you have determined that your spent parts washer solution is truly "non-hazardous" using laboratory analyses, then yes, you may mix your spent "non-hazardous" parts washer solution with your used oil, and handle the mixture as a used oil, including burning to heat your facility. However, you must still follow the burner manufacturer's specifications and requirements prior to burning anything other than used oil in your burner. Should you have any questions, please contact the DES Used Oil Program at (603) 271-6424.

3. If your spent parts washer solution is hazardous due to ignitability only, (i.e., flashpoint analyses show the spent parts washer solution is less than 140˚F and it is not hazardous for any other reason), then the spent parts washer solution/used oil *mixture* only has to pass the hazardous waste standard for ignitability.

    - **If the flashpoint of the *mixture* is greater than 140˚F, the mixture can be managed as used oil and can be burned for energy recovery in an appropriate used oil space heater.**
    - **If the flashpoint of the *mixture* is less than 140˚F, the mixture is a hazardous waste and must be managed in accordance with the Hazardous Waste Generator Requirements (Env-Hw 500).**

For More Information

Questions pertaining to regulation of parts washer wastes should be directed to the Department of Environmental Services, Hazardous Waste Management Bureau at 1-866-HAZWAST (1-866-429-9278), or (603) 271-2942. A list of registered New Hampshire hazardous waste transporters, a list of laboratories that can perform the chemical analyses necessary for a hazardous waste determination, copies of other fact sheets, and the Hazardous Waste Rules are available on the DES web site at www.des.nh.gov.